



Drop, Cover, and Hold On **Earthquake Drill Manual for** **Government Agencies and Facilities**

Are You Ready to ShakeOut?

The central United States is earthquake country. A large earthquake could become an unprecedented catastrophe, affecting multiple states and have a devastating impact on the national transportation system, electric power grid, and economy. With earthquakes as an inevitable part of our future, government agencies of all sizes *must* make plans and take actions to reduce the consequences of these disasters. What we do now will determine what our lives will be like afterwards. With this in mind, the Central United States Earthquake Consortium and its Member States created the Great Central U.S. ShakeOut (www.shakeout.org/centralus), an earthquake drill and preparedness activity which allows everyone to participate.

The principles practiced in the ShakeOut can be applied to many other hazards. Government Agencies also need to be prepared for fire, flood, hazardous materials release, and pandemics. In particular, agencies can use the drill to get their staff, communities, and states involved and prepared for a big earthquake. Furthermore, the level of your staffs' personal and family preparedness will be key them being availability to support your organization after a disaster.

The following drill guidelines are designed for government agencies of all sizes and each drill uses the general earthquake response of *Drop, Cover, and Hold On* (www.dropcoverholdon.org) as its foundation. To be flexible, three levels of drills (simple, basic, intermediate) are provided below, each with steps to be taken before, during, and after the drill. Each drill uses the general earthquake response of Drop, Cover, and Hold On (www.dropcoverholdon.org) as its foundation. (NOTE: If you would like a more advanced drill than offered here, please consider adapting the Level 3 or Level 4 drills from our Central US ShakeOut manuals for Businesses or Non-Profits <http://www.shakeout.org/centralus/resources>.)

Drills for Government Agencies and Facilities

Level 1 – Simple: *Drop, Cover, and Hold On* Drill..... 1

This drill shows participants how to perform *Drop, Cover, and Hold On* -a quake-safe action designed to protect people from falling furniture and objects that may become projectiles during ground shaking.

Level 2 – Basic: Life Safety Drill 5

This life safety drill is designed to help participants think through their emergency response actions during the drill, then afterwards to review and discuss what worked and what did not, and then make appropriate improvements before the next drill or actual earthquake.

Level 3 – Intermediate: Life Safety and Continuity Planning Drill7

This drill expands upon the Level 2 drill, which helps participants think through their life safety and emergency response actions during an earthquake, and adds management post-drill discussions and review.

Level 1 – Simple: Drop, Cover, and Hold On Drill

This drill first explains how to perform *Drop, Cover, and Hold On* – a quake-safe action designed to protect people from falling furniture and objects that can become projectiles during ground shaking – then has them *Drop, Cover, and Hold On* during a simulated earthquake.

BEFORE the Drill

1. If you will participate in the Great Central U.S. ShakeOut, please register your agency or facility as an official participant at www.shakeout.org/centralus. (*Registrants may receive e-mail updates and notification of additional information added to the web site.*)
2. Let participants know:
 - ☐ The date and time of your drill.
 - ☐ How to correctly perform *Drop, Cover, and Hold On*, wherever they are (www.dropcoverholdon.org), which includes taking cover beneath a sturdy table or desk, or dropping to the floor near an interior wall and covering your head with your hands and arms. Develop special procedures for unique locations such as offices with glass walls.
 - ☐ Your expectations for their participation (i.e. *Drop/Cover/Hold On*, gather at a central location for a head count, post-drill discussions).
3. Encourage your staff to invite friends, families, and neighbors to register as individuals or organizations at www.shakeout.org/centralus, so they can participate and receive information directly on how to be safe during an earthquake.
4. (Optional) *Before the drill*, download realistic sound effects and safety information to play for participants during your drill from <http://www.shakeout.org/centralus/resources>. (*Download and test before the drill. Don't try to play them from the web site during the drill.*)

DURING the Drill

1. Via the public address (PA) system, e-mail, cell phone/text message, or verbally (in a real earthquake your signal will be the beginning of shaking itself):
 - ☐ Announce that the earthquake drill has begun and to *Drop, Cover, and Hold On*.
 - ☐ (Optional) Play the downloaded sound effects recording (<http://www.shakeout.org/centralus/resources>) on your PA or on a computer in each office.
 - ☐ Suggest that while down on the floor, your staff look around at what could be falling on them in an earthquake. These items should be secured or moved after the drill.
2. If not using the optional downloaded sound effects, after at least one minute announce that the shaking is over and that participants can stand up again. Thank them for participating.

Level 1 – Simple: Drop, Cover, and Hold On Drill (cont'd)

3. Encourage participants to discuss their drill experiences and observations and how they could better prepare.

AFTER the Drill

1. Ask for feedback on how the drill went.
2. Schedule the next drill for one year later (or sooner if your staff need to practice or procedures change).
3. Share photos and stories at www.shakeout.org/centralus. *(A link will be available on this web site for uploading these following the ShakeOut.)*
4. Encourage participants to prepare at home using the 7 Steps to Earthquake Safety from “Putting Down Roots in Earthquake Country” http://www.earthquakecountry.info/roots/seven_steps.html.

Level 2 – Basic: Life Safety Drill

This drill focuses on immediate life safety and helps participants think through their emergency response actions during an earthquake. *It can be used whether or not your organization has developed a disaster plan or Continuity of Operations Plan.*

BEFORE the Drill

1. If you will participate in the Great Central U.S. ShakeOut, please register your agency or facility as an official participant at www.shakeout.org/centralus. *(Registrants may receive e-mail updates and notification when additional information is added to the web site.)*
2. Let your staff know whether registration will be at the corporate or departmental level or if separate office locations should register individually. *(Registrants may receive e-mail updates and notification when additional information is added to the web site.)*
3. If your facility serves the general public, determine how or whether you will involve them in the drill.
4. Let your staff know:
 - ☐ The date and time of your drill.
 - ☐ How to correctly perform *Drop, Cover, and Hold On*, wherever they are (www.dropcoverholdon.org), which includes taking cover beneath a sturdy table or desk, or dropping to the floor near an interior wall and covering your head with your hands and arms. Develop special procedures for unique locations such as offices with glass walls.
 - ☐ Your expectations for their participation (i.e., to *Drop, Cover, and Hold On*, then gather at a central location to account for occupants after the shaking stops, etc).
 - If away from the office - set a cell phone alarm for the time of the drill, and to encourage those they are with to participate as well.
 - If unable to *Drop, Cover, and Hold On* during the drill - pause at drill-time to consider what you would do if an earthquake were to strike at that moment.
 - ☐ Encourage your staff to invite friends, families, and neighbors to register as individuals or organizations at www.shakeout.org/centralus, so they can participate and receive information directly on how to be safe during an earthquake.
5. Steps or Questions to Consider:
 - ☐ How will you direct staff during and immediately following the shaking?
 - Safety must be the first priority, so carefully assess the environment inside and outside of your facility before deciding. Consider factors (your location, building type, damage impacts) that will influence your decisions after the earthquake (i.e., evacuating vs. staying put).

Level 2 – Basic: Life Safety Drill (cont’d)

6. Write a brief description of the earthquake’s impact along with some questions for staff to consider, to be provided to participants during the exercise.. For ideas, review the ShakeOut Scenario at www.shakeout.org/centralus/scenario
7. (Optional) *Before the drill*, download realistic sound effects and safety information to play for participants during your drill from <http://www.shakeout.org/centralus/resources>. (*Download and test before the drill. Don’t try to play them from the web site during the drill.*)
8. Distribute ShakeOut posters/flyers from <http://www.shakeout.org/centralus/resources> to encourage your staff and community to participate.
9. Determine whether to add post-shaking building evacuation to the drill: Based on the age and type of your building and the environment inside/outside of building, etc., determine whether you would evacuate after an earthquake, or whether you would first *assess the building’s damage* before directing your staff to either stay put or evacuate. Consider what new safety hazards might be caused by the earthquake from fallen or broken objects (both in the building and outside) or ground deformation. *Automatic evacuation after an earthquake may not be a safe action.*

The Night BEFORE the Drill

Tape the brief description of the earthquake’s impact under desks and conference tables or provide staff with sealed envelopes to open during the drill. (*You can use email, but it is more effective if they do not read this until during the drill.*)

DURING the Drill

1. Via e-mail, cell phone/text message, public address (PA) system, or verbally (in a real earthquake your signal will be the beginning of shaking itself):
 - ☐ Announce that the earthquake drill has begun and to *Drop, Cover, and Hold On*.
 - ☐ (Optional) Play the downloaded sound effects (<http://www.shakeout.org/centralus/resources>) on your PA or on a computer in each office.
 - ☐ Suggest that while down on the floor, your staff look around at what might fall on them during an earthquake. Secure or move items after the drill to prevent injury and damage.
2. If not using optional downloaded sound effects, then after at least one minute, announce that the shaking is over.
3. If your drill includes additional steps or activities such as evacuation to another location, initiate this part of your drill but consider new hazards from fallen or broken objects (both inside and outside the building) or ground deformation that might be caused by the earthquake. *Automatic evacuation after an earthquake may not be a safe action.*

Level 2 – Basic: Life Safety Drill (cont'd)

- During a real earthquake aftershocks may occur. If an aftershock occurs while you are exiting, *Drop, Cover, and Hold On* again until the shaking stops.
 - When the shaking has stopped (or when the all clear bell rings) IMMEDIATELY and before you exit your room take ten seconds to look around, make a mental note of damage and dangers, check to see if any one is injured. If immediate help can be given to those with injuries to stop serious bleeding, or put out a small fire, do so. Ask others to assist the lightly injured. Non-ambulatory injured should be reassured and wait for treatment where they are, unless it is more dangerous to remain.

4. Encourage your staff to discuss their drill experiences, observations and how they could better prepare.

AFTER the Drill

1. Ask for feedback on how the drill went, how it could be improved, and how your government agency, department, office, or facility can be better prepared.
 - Discuss preparedness at work and home. (Your staffs' home/family preparedness will allow them to either stay at work, or return to work more rapidly, to support your agency's mission to recover and serve the public).
 - Discuss non-first responder staff responsibilities and agency life safety priorities.
2. Follow up with an e-mail reminder about emergency protective actions in an earthquake (e.g. *Drop, Cover, and Hold On*) and encourage staff to practice these actions at home.
3. Share lessons learned from the drill with those people responsible for your agency's emergency response planning to update the plan/procedures and staff training
4. Schedule your next drill one year from now (or sooner if your staff needs more practice, or your procedures are updated) so your staff can practice life safety procedures.
5. Share your photos and stories from the drill at www.shakeout.org/centralus. (A link will be available on this web site for uploading these following the ShakeOut.)
6. Encourage your staff to prepare at home using the *7 Steps to Earthquake Safety* from "Putting Down Roots in Earthquake Country" (see www.earthquakecountry.org).
7. The more immediate the post-drill feedback, evaluation results, or brief out, the better it will be received. After several days, the drill will not be fresh on the minds of participants and they will lose interest.

Level 3 – Intermediate: Life Safety and Response Planning Drill

This drill expands upon the Level 2 drill, which helps participants think through their life safety and emergency response actions during an earthquake, and adds management post-drill discussions and review. *It can be used whether or not your organization has developed a disaster plan (or Continuity of Operations Plan). If you have one, you can incorporate it into this drill to become more familiar with the plan and your procedures.*

BEFORE the Drill

1. If you will participate in the Great Central U.S. ShakeOut, please register your agency or facility as an official participant at www.shakeout.org/centralus. (Registrants may receive e-mail updates and notification when additional information is added to the web site.)
 - ☐ Determine whether registration will be at the jurisdiction/agency level, or whether you will instruct your departments or facilities to register individually.
2. Bring together a team of individuals from your agency to design and plan the drill. Learn about potential earthquakes for your area and use your team to develop your own “agency disaster scenario” with specific details of how you might expect the shaking to impact your agency (i.e., the building, operations, staff, public, etc.). For ideas, review the ShakeOut Scenario at www.shakeout.org/centralus/scenario. Consider the following:
 - ☐ Would the power be out? Phone communications down? Loading dock severely damaged?
 - ☐ How will you direct your staff during and immediately following the shaking?
 - ☐ Consider that certain factors (your location, building type, damage impacts) will influence your decisions regarding what to do immediately after the earthquake (i.e., evacuating vs. staying put) and in the longer term (how customers will get to you).
 - ☐ Identify who is authorized to make and communicate post-earthquake decisions.
 - ☐ If your organization has “floor wardens” for fire evacuation, how will you use them during earthquakes, especially if you do not evacuate?
 - ☐ Make sure the impacts you determine for your “agency disaster scenario” make it possible to support your drill objectives. (Note: If you “wipe-out” the whole community, you eliminate your reason to drill)
 - ☐ Draft or review your emergency procedures for an earthquake.
 - ☐ Determine the length of your drill and its objectives.
 - ☐ If you have a disaster plan, the objectives and resulting drill can test those parts of your plan you want or need to dry run or validate.
 - ☐ Draft, review, and complete your “agency disaster scenario” for the drill.

Level 3 – Intermediate: Life Safety and Response Planning Drill (cont'd)

- ☐ Write a brief description of the earthquake's impact using your "agency disaster scenario" along with some questions for your staff to consider, to be provided to participants during the exercise.
- 3. If your facility serves the general public, determine whether you will involve them in the drill, treating this similar to a fire alarm during hours of public operation. You can also hold your drill either before or after public hours, but this removes the realism of practicing quake-safe procedures with customers.
- 4. Invite your agency's elected officials, executives, and key decision-makers to participate in your drill. If you already have a plan, have them review it prior to the drill.
- 5. (Optional) *Before the drill*, download realistic sound effects and safety information to play for participants during your drill from <http://www.shakeout.org/centralus/resources>. (*Download and test before the drill. Don't try to play them from the web site during the drill.*)
- 6. Let your staff know:
 - ☐ The date and time of your drill.
 - ☐ How to correctly perform *Drop, Cover, and Hold On*, wherever they are (www.dropcoverholdon.org), which includes taking cover beneath a sturdy table or desk, or dropping to the floor near an interior wall and covering your head with your hands and arms. Develop special procedures for unique locations such as offices with glass walls.
 - ☐ Your expectations for their participation (i.e., to *Drop, Cover, and Hold On*, and then after the shaking stops, to gather at a central location to account for occupants, etc.)
 - If away from the office - set a cell phone alarm for the time of the drill, and encourage those they are with to participate as well.
 - If unable to *Drop, Cover, and Hold On* during the drill - pause at drill-time to consider what you would do if an earthquake were to strike at that moment.
 - ☐ If your drill is part of the Great Central U.S. ShakeOut, encourage staff to invite friends, families, and neighbors to register as individuals or organizations at www.shakeout.org/centralus, so they can participate and receive information directly on how to be safe during an earthquake.
- 7. Distribute ShakeOut posters/flyers from <http://www.shakeout.org/centralus/resources> to encourage your community to participate.
- 8. Determine whether to add post-shaking building evacuation to the drill: Based on the age and type of your building and the environment inside/outside of building, etc., determine whether you would evacuate after an earthquake, or whether you would first *assess the building's damage* before directing staff to either stay put or evacuate. Consider what new safety hazards might be caused by the earthquake from fallen or broken

Level 3 – Intermediate: Life Safety and Response Planning Drill (cont’d)

objects (both in the building and outside) or ground deformation. *Automatic evacuation after an earthquake may not be a safe action.*

The Night BEFORE the Drill

Tape the brief description of the earthquake’s impact developed in advance by your planning team under desks and conference tables or provide your staff sealed envelopes to open during the drill. (*You can use email, but it is more effective if they do not read this until during the drill.*)

DURING the Drill

1. Via your public announcement system, email, cell phone/text reminder or verbally:
 - ☐ Announce that the earthquake drill has begun and strong shaking could last one minute.
 - ☐ (Optional) Play the audio recording (see above) on your PA or, alternatively, play it on a computer in each office.
 - ☐ Tell everyone to *Drop, Cover, and Hold On* then open the envelope taped under their desk.
 - ☐ Suggest that while down on the floor, your staff look around at what would be falling on them in a real earthquake, and these items should be secured or moved after the drill.
2. If not using optional downloaded sound effects, then after at least one minute, announce that the shaking is over.
3. Automatically evacuating after an earthquake may not be a safe action. If your drill includes additional steps or activities such as evacuation to another location, initiate this part of your drill but consider new hazards from fallen or broken objects.
4. Encourage staff to discuss their experiences and observations.

AFTER the Drill

1. Hold staff meetings as soon as possible after the drill to discuss what happened, people’s experiences during the drill, what they were thinking about, what caused concern, what worked and what did not, etc. Take this opportunity to:
 - ☐ Discuss preparedness at work and at home. Your staffs’ home/family preparedness will allow them to either stay at work (or return to work more rapidly) to support your agency’s recovery and serve the public.
 - ☐ Review agency staff emergency responsibilities.
 - ☐ Review post-disaster Continuity of Government staff responsibilities and applicable mandates.

- ☐ Update emergency contact phone lists and go over call-back procedures.
- ☐ Discuss your safety and operations resumption priorities.
- ☐ Include your staff in committees to update your plan with lessons learned from the drill or any real experiences.
- ☐ Listen attentively to staff suggestions.

2. At your management level:

- ☐ Review staff and management emergency responsibilities.
- ☐ Review and recommend updates to Continuity of Government responsibilities and plans to Emergency Management.
- ☐ Discuss call-back procedures and ensure call-back phone lists are up to date.
- ☐ Discuss your safety and operations resumption priorities.
- ☐ Update your disaster plan with lessons learned from the drill.

3. Within your department, agency or jurisdiction management level, meet with those who are specifically responsible for Emergency Management issues to discuss lessons learned and recommendations for plan updates. Schedule updated training, followed by further drills and exercises of emergency response and Continuity of Government plans.
4. Schedule your next drill one year from now (sooner if your staff need more practice, or if the plan is changed/updated).
5. Share your drill photos and stories at www.shakeout.org/centralus. (A link will be available on this web site for uploading these following the ShakeOut.)
6. Encourage your staff to prepare at home using the *7 Steps to Earthquake Safety* from “Putting Down Roots in Earthquake Country” (see www.earthquakecountry.org).
7. The more immediate the post-drill feedback, evaluation results, or brief out, the better it will be received. After a few days, the drill will not be fresh on the minds of participants and they will lose interest.